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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,735	01/31/2001	Vladimir E. Popov	1373 (SURA)	2663

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8652 RIO GRANDE ROAD
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EXAMINER

A, MINH D

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 08/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,735

Applicant(s)

POPOV, VLADIMIR E.

Examiner

Minh D A

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6-10 and 12 are rejected under 35 U.S.C. 102(b) as being unpatentable by Johnsen et al (US 6,121,619).

Regarding claims 1 and 7, Johnsen discloses a failure predictor for photo-multiplier tubes comprising: a electronic circuitry (detector (10) and processor (17)) that provides stable power and gain control for dynode stages of a photo-multiplier tube (PMT); and an amplifying circuit (15) for amplifying a PMT output signal and producing an amplified PMT signal; wherein: the electronic circuitry (10 and 17) and the amplifying circuit (15) are integrated into one replaceable component that receives power from a PMT high voltage divider; the PMT base provides pulse shape enhancement; and the PMT base can be electrically connected to the PMT. See figures 1-3, col.7, lines 11 to col.12, lines 1-62.

Regarding claim 2, Johnsen discloses the PMT output signal (11 or 13) travels from an anode of the PMT to the amplifying circuit (15). See figure 1.

Regarding claim 3, Johnsen discloses the PMT output signal (11 or 13) travels from a dynode of the PMT to the amplifying circuit (15). See figure 1.

Regarding claim 4. The PMT base of claim 1 wherein, the PMT output signal (11 and 13) travels from both a dynode and an anode of the PMT to the amplifying circuit. See figure 1.

Regarding claims 6 and 12, Johnsen discloses the amplifying circuit (15) comprises a multistage amplifiers (11). See figure 1.

Regarding claim 8, Johnsen disclose an electrically connecting an anode of the PMT to an input of the amplifying circuit so that the amplifying circuit receives the PMT output signal from the anode of the PMT. See figure 1.

Regarding claim 9, Johnsen discloses an electrically connecting a dynode of the PMT to an input of the amplifying circuit so that the amplifying circuit receives the PMT output signal from the dynode of the PMT. See figure 1.

Regarding claim 10. Johnsen discloses an electrically connecting an anode and a dynode of the PMT to an input of the amplifying circuit so that the amplifying circuit (15) receives the PMT output signal from both the anode and the dynode of the PMT. See figure 1.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 5, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable by Johnsen et al (US 6,121,619).

Regarding claims 5, 11 and 13, Johnsen discloses the claimed invention except for a transistor amplifier or an amplifier pulse shaper. It would have been an obvious matter of design choice to have the transistor amplifier or the amplifier pulse shaper, since applicant has not disclosed that the transistor amplifier or the amplifier pulse shaper solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the transistor amplifier or the amplifier pulse shaper.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gibbons. (US 5,525,794); Kyushima et al. (US 5,736,731) are cited to show a photo-multiplier tube.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (703) 605-4247. The examiner can normally be reached on M-F (7:30 –4:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (703) 308-4856. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and (703) 872-9319 for final communications.

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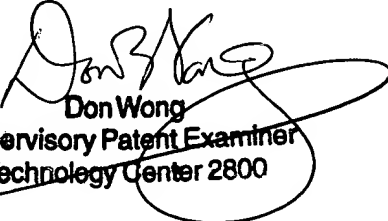
Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

Examiner

Minh A

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07/26/03


Don Wong
Supervisory Patent Examiner
Technology Center 2800